

### ABSTRACT OF THE DISCLOSURE

The present invention provides for a method and apparatus to detect concealed items on or in an object by producing a pencil beam of x-rays from an x-ray source directed toward said object, scanning the beam of x-rays over the object, and detecting x-rays scattered from the beam of x-rays as a result of interacting with the object and a low Z material panel, the object located between the detector and the panel. The apparatus provides for an x-ray source to produce a pencil beam of x-rays directed toward an object, a scanner to scan the beam of x-rays over the object, and a detector to detect x-rays scattered from the beam of x-rays as a result of interacting with the object and the low Z material panel, the object located between the detector and the panel.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20